[0042] In the illustrated example, the processor **402** of the mobile device **102** is structured to include the billboard segmenter **126**. The processor **402** may be any suitable processing device or set of processing devices such as, but not limited to, a microprocessor, a microcontroller-based platform, an integrated circuit, one or more field programmable gate arrays (FPGAs), and/or one or more application-specific integrated circuits (ASICs).

[0043] The memory **404** may be volatile memory (e.g., RAM including non-volatile RAM, magnetic RAM, ferroelectric RAM, etc.), non-volatile memory (e.g., disk memory, FLASH memory, EPROMs, EEPROMs, memristor-based non-volatile solid-state memory, etc.), unalterable memory (e.g., EPROMs), read-only memory, and/or high-capacity storage devices (e.g., hard drives, solid state drives, etc.). In some examples, the memory **404** includes multiple kinds of memory, particularly volatile memory and non-volatile memory.

[0044] The memory **404** is computer readable media on which one or more sets of instructions, such as the software for operating the methods of the present disclosure, can be embedded. The instructions may embody one or more of the methods or logic as described herein. For example, the memory **404** includes computer readable memory on which instructions for the application for accessing digital keys are embedded. The instructions may reside completely, or at least partially, within any one or more of the memory **404**, the computer readable medium, and/or within the processor **402** during execution of the instructions.

[0045] The terms "non-transitory computer-readable medium" and "computer-readable medium" include a single medium or multiple media, such as a centralized or distributed database, and/or associated caches and servers that store one or more sets of instructions. Further, the terms "non-transitory computer-readable medium" and "computer-readable medium" include any tangible medium that is capable of storing, encoding or carrying a set of instructions for execution by a processor or that cause a system to perform any one or more of the methods or operations disclosed herein. As used herein, the term "computer readable medium" is expressly defined to include any type of computer readable storage device and/or storage disk and to exclude propagating signals.

[0046] The GPS receiver **406** of the electronic components **400** identifies a location of the mobile device **102**. For example, the GPS receiver **406** is utilized to track the location of the mobile device **102** as the mobile device **102** travels from one location to another location. In instances in which the mobile device **102** is located within the interior of the vehicle **100**, the GPS receiver **406** may be utilized to track the location of the vehicle **100** as the vehicle **100** travels along a set of directions from one location to another location. Additionally, or alternatively, the GPS receiver **116** of the vehicle **100** may be utilized to track the location of the vehicle **100** as the vehicle **100** travels along the set of directions.

[0047] Further, the camera **408** of the vehicle **100** is utilized to collect, receive and/or otherwise obtain the image **200** of the advertisement **110** of the billboard **108** as the vehicle **100** approaches the billboard **108**. The mobile device **102** is positioned by the user **104** within the interior of the vehicle **100** such that the camera **408** is able to obtain the image **200** of the advertisement **110**. For example, the user **104** may couple the mobile device **102** to an interior surface of a windshield of the vehicle **100** or may lie the mobile device **102** on a dash of the vehicle **100** to enable the camera **408** of the mobile device **102** to obtain the image **200** of the billboard **108**.

[0048] The communication module **410** is communicatively coupled to a network (e.g., the Internet) that includes a database. For example, the database includes the segment entries associated with segments of billboard advertisements and events entries that correspond to the segment entries. The database of segment entries and corresponding event entries may be created and/or curated by an entity such as an advertising entity that operates billboards and/or other entities that utilize the billboards for advertising. The communication module **410** enables the billboard segmenter **126** to access the database to identify events associated with one or more of the segments **202**, **204**, **206**, **208**, **210**, **212** of the image **200** of the advertisement **110** of the billboard **108**. In some examples, the database is indexed by GPS location of billboards to facilitate identification of the segment entries and/or to avoid the inclusion of duplicative segment entries. In some examples, updates to the database may be instantly or automatically sent to the billboard segmenter **126** via the communication module **410** so that the billboard segmenter **126** is able to update the billboard interface **300**. For example, a restaurant may remove a segment entry associated with a coupon for the restaurant when the restaurant is full, and the billboard segmenter **126** may subsequently automatically remove the segment associated with the coupon from the billboard interface **300**. Further, in some examples, the communication module **410** also communicatively couples to the communication module **132** of the billboard **108** to enable the billboard processor **130** to select and/or personalize advertisements for the user **104** as the vehicle **100** approaches the billboard **108**.

[0049] The communication module **412** of the mobile device **102** is to communicatively couple to the communication module **114** of the vehicle **100**. In the illustrated example, the communication module **412** is a short-range wireless module that includes a wireless transducer to wirelessly communicate with the vehicle **100** and/or another device when that device is within a broadcast range of the communication module **412**. The short-range wireless module includes hardware and firmware to establish a connection with the communication module **114** of the vehicle **100**. In some examples, the short-range wireless module implements the Bluetooth and/or Bluetooth Low Energy (BLE) protocols.

[0050] The display **414** presents an interface to provide information to the user **104** via the mobile device **102**. For example, the display **414** may present the billboard interface **300** to the user **104**. In some such examples, the display **414** is a touch screen that enables the user **104** to select one or more of the hyperlinks of the billboard interface **300**.

[0051] FIG. **5** is a block diagram of electronic components **500** of the vehicle **100**. As illustrated in FIG. **5**, the electronic components **500** include an on-board computing platform **502**, the infotainment head unit **112** that includes the display **120** and the speaker **122**, the GPS receiver **116**, sensors **504**, electronic control units (ECUs) **506**, and a vehicle data bus **508**.

[0052] The on-board computing platform **502** includes a microcontroller unit, controller or processor **510** and memory **512**. In some examples, the on-board computing platform **502** is structured to include billboard linker **128**.